



Promoting recycling, watershed education and environmental stewardship for Nevada

A Publication for School and Community educators



Sustainability during the Holidays

Sustainability refers to the ways that people, companies and governments employ strategies to minimize the environmental impact of their actions on future generations. Here are some ways you can increase sustainability by reducing, reusing and recycling this Holiday season.

Buy local—Purchasing locally grown or made products, or from small locally owned businesses can reduce our energy consumption, help to sustain our local economy and provide jobs to our neighbors. Small businesses help to meet local consumer demand, and add vibrancy, stability and a sense of community to our cities.

Buy products that are made from recycled or sustainable materials—By purchasing things made from recycled materials we are “closing the loop” on recycling. Instead of items made from plastic or other non-sustainable resources, buy items that are made from renewable materials like wood, ceramics and glass, or natural fibers such as wool, bamboo and hemp.

Buy products from socially/environmentally conscious companies—These companies give back to their communities and operate responsibly in regards to the environment and society. Here is a link to [Green America's](#) list of businesses certified for their social and environmental impacts.

Buy reusable items—Give reusable water bottles, travel mugs, lunch kits or shopping totes as gifts. When hosting a party use washable plates, cups and tableware. It makes for a little more work, but it reduces waste and saves money. At this year's holiday gathering, put a recycling container next to your garbage can to encourage guests to recycle those bottles and cans.

Buy experiences—Instead of buying someone a gift they don't really need, consider a ticket to a concert, play or sporting event, or a day at a spa, skiing or some other experience.

Buy quality items over quantity—By purchasing well-made clothing or gear we reduce waste because the item will last longer, and not need to be replaced as soon. Try to purchase items that can be repaired instead of replaced. With the internet, it's easier than ever to find the resources to repair almost anything. “[iFixit](#)” has put together repair guides for many things such as electronics, cars, apparel, eye-glasses, and much more.

Make some of your own gifts—Many websites have creative ideas for making your own gifts and decorations. It can be fun to create gifts or decorations using things you might usually throw away like old Christmas cards, milk cartons or plastic bottles, or by repurposing pallets, vinyl records or other scrap materials.

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Recycling Survey RESULTS

Thank you to those who participated in last issue's **Recycling Survey for Teachers**. The survey asked teachers about the ease of recycling on school campuses. The results are in and everyone seemed to agree that the infrastructure is in place, meaning the option to recycle is available. However, because of a lack of education and/or signage, many recycling containers become contaminated with food, drink, and other items inappropriately thrown away that make the contents unrecyclable.

As the school year continues, please keep in mind:

- ◆ You can contact your [Northern or Southern NV Recycling Coordinator](#) for assistance and questions about recycling at your school.
- ◆ Keeping a trash container next to a recycling container will help with the ease of recycling. If a recycling container is alone, it will most likely become "trash" contaminated.
- ◆ Most of today's school waste comes from the cafeteria. Think disposable plastic sandwich bags, disposable water bottles, aluminum foil, and everyday general food waste. Reusable plastic/glass containers, water bottles and washable items reduce this waste.

Does it really matter how well we sort recyclables before they are picked up? It matters a lot. The curse for any recycling operation is thin plastic bags. They cause problems with the processing equipment and have to be removed. There has been ongoing debate with paper versus plastic. Now experts realize that what we really want is to reduce the use of plastic or paper bags and make better use of reusable totes.

Recycling 1 ton of paper saves on average:

7,000 gal (26,498 l) water
 3.3 cubic yards (2.5 cubic meters) landfill space
 3 barrels of oil (1 barrel = 42 gal)
 17 trees
 4,000 kWh of electricity—energy to power a home for 6 months

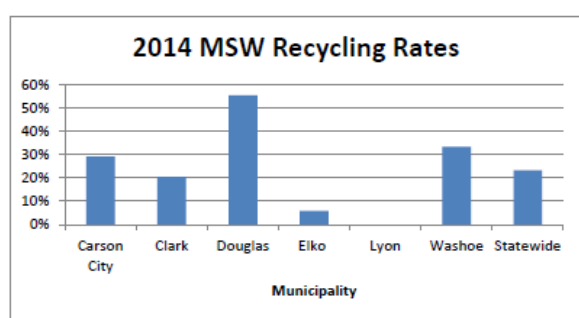
Source: Gale Book of Averages, p. 428.

If your school does not have a recycling program in place check online: [Waste Reduction, Reuse and Recycling: A Guide for Schools in Nevada](#) or contact your [Nevada recycling coordinator](#)! Visit [NevadaRecycles.nv.gov](#) for more ideas and tips to conserve.

2014 Nevada Municipal Solid Waste Recycling Rate: 23.4%

The 2014 recycling rate for Nevada (23.4%) was down 1.7% from the 2013 recycling rate of 25.1%. Nevadans recycled less and the total amount of municipal solid waste collected increased by 4,163 tons (83,264,000 lbs). There can be many reasons why the recycling rate decreased, but one factor was the

closure of the Southern Nevada composting facility, which customarily received a lot of food waste. This means that we need to try to limit our waste in the first place. Schools are the perfect place to start!



Commodity Type	Annual Tonnage
Paper	30.07%
Metals	35.76%
Plastic	3.19%
Glass	5.35%
Organic Material	20.84%
Special Waste	3.78%
Textiles	0.03%
Other	0.97%
Total Tonnage	100.00%

There is no Away!*

Garbage never really goes away! A can or newspaper may “disappear” into the garbage can, recycling bin, landfill or storm drain, but is it really gone? Garbage accumulation, formally known as “municipal solid waste” (everyday stuff we throw away: packaging products, furniture, glass, food, newspapers, appliances, paint, batteries) is not only a local challenge but an issue of global concern.

Today, most communities use a combination of waste management practices such as waste prevention, landfill operations with controlled burning, and recycling and composting. A mix of activities helps protect the health and safety of our communities and the surrounding environment.

Every day each of us generates trash. By looking closely at what we throw away and understanding our recycling practices and rate of recycling, we begin to discover how much garbage is produced, and how much of it can be repurposed, reused, recycled or composted.

When we reuse, recycle, compost or dispose of trash properly, we become extraordinary stewards of the



Taking control of our trash helps makes recycling a daily practice.

environment and our communities. We start by taking responsibility for our immediate environment. It's one person, one piece of trash at a time. The results are powerful! Let's protect and preserve Nevada's resources.

*Project WET Educators: There Is No Away is an engaging activity in the Project WET Curriculum and Activity Guide, Page 452. Check it out!

TERMS DEFINED

WASTE PREVENTION means to reduce needless consumption and the generation of waste. This actually avoids waste generation and is the preferred waste management activity. It means purchasing durable, long-lasting products or switching from disposable to reusable products. Waste prevention conserves resources, protects the environment and prevents the formation of greenhouse gases.

RECYCLING occurs before waste reaches the landfill; it uses materials that could become waste by turning them into valuable resources. Homes and schools offer treasure troves of items that can be reused, recycled, or upcycled. For guidance and assistance with school recycling and waste reduction efforts, see the [Recycling Guide for Nevada Schools](#). Check the [Recycling Locator Map](#) for communities without curbside recycling and drop-off recycling options. Recycling helps reduce greenhouse gas emissions, in part, by diverting waste from landfills.

COMPOSTING is another form of recycling. It's the aerobic biological decomposition of organic matter, like food waste and plant matter, into humus, a soil-like material. Organic materials comprise a large portion of the solid waste stream. Compost becomes a natural fertilizer that provides nutrients to soil and suppresses plant diseases, hence reducing a need for chemical fertilizers and pesticides.

COMBUSTION is controlled burning to reduce the volume of waste going to landfills. In some cases, it generates electricity to reduce reliance on coal, one of the fossil fuels that produce greenhouse gases when burned. Incineration is sometimes selected by communities when landfill space is limited. The combustion process can generate toxic emissions, but these are controlled by installing scrubbers and filters in combustors.

LANDFILLS, when properly designed, constructed and managed, provide a safe alternative to uncontrolled dumping. Today's landfills have an earthen or synthetic liner to protect groundwater from the liquid that collects in landfills (leachate). They provide a way to vent, burn, or collect methane, a greenhouse gas that forms as waste decomposes. Landfill operations can recover methane gas —thereby reducing emissions—to generate electricity.



Learn more at www.nps.gov

Every Kid in a Park What a great opportunity! Today, more than 80% of American families live in urban areas. So, to reach the next generation of park visitors, supporters and advocates, the White House and Federal Land Management agencies launched the [Every Kid in a Park](#) youth initiative.

Every year, 4th graders can obtain *free admission* to explore America's national parks, national forests, national wildlife refuges, and more! Our national parks protect our wildlife and natural resources and are waiting to be discovered by 4th graders, with friends and family in tow. Connect with a kid! Discover America's history, cultural artifacts, cultural structures, and open spaces with plants and wildlife and even see some amazing water features.

Fourth-grade educators* can download [passes for students](#) and even [plan a field trip](#). *Denotes any adult who engages 4th graders through education or youth organizations (i.e. camp directors, home-school leaders, after-school leaders, or religious group leaders). Passes are also good at all [Nevada State Parks](#).

Before You Go: Engage in Project WET's Lesson, **Discover the Waters of our National Parks** (PWET Guide, page 493). Students can learn about and plan their trip to a favorite national park, battlefield, monuments or seashores with mapping activities, games and storytelling.

***Remember to leave only footsteps.
Take only pictures.***



More than 20,000 National Park Service employees care for America's 408 national parks and work with communities across the nation to help preserve local history and create close-to-home outdoor opportunities.



Courtesy of Judy Wickwire

Tree Advice

**Stand tall and proud
Remember your roots
Drink plenty of water
Be content with your natural
beauty
Enjoy the view**

Concrete to Canyons

The Concrete to Canyons Partnership (C2C) is hosted by [Zion National Park \(Zion\)](#), [Lake Mead National Recreation Area \(LAKE\)](#), and [Parashant National Monument](#) with the goal of fostering life-long connections to national parks and their wilderness areas. This past year 100 fifth graders from Andre Agassi Preparatory Academy and Rainbow Dreams Academy of Las Vegas visited Zion. The field experience includes three days and two nights of wilderness camping and includes ecology lessons, wildlife observations, and a night sky program where students use telescopes to view the Milky Way. The wilderness experience is followed with a day trip to visit Lake Mead National Recreation Area.

Students further their experiential learning about wilderness areas within the LAKE and plant communities of the Mojave Desert. Students also participate in a restoration project at the Song Dog Native Plant Nursery at LAKE, where they learn about stewardship.

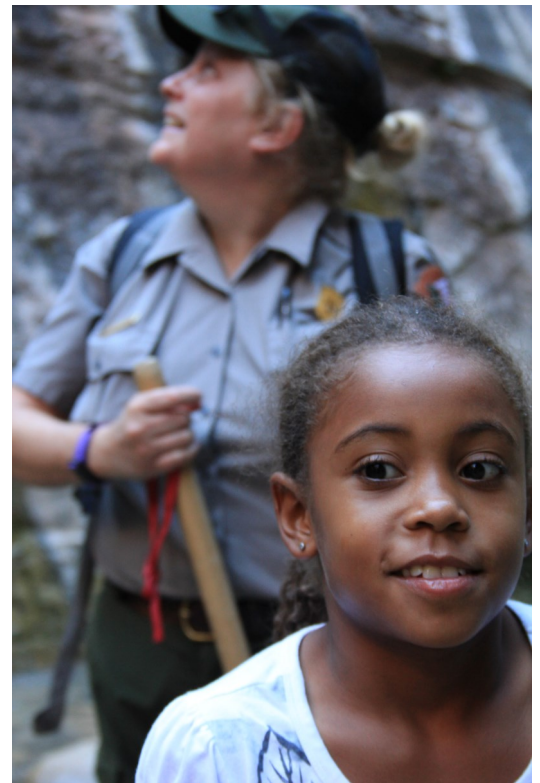
The C2C program was started three years ago by the National Park Foundation through a “Parks as Classroom” grant. The program works with schools from the City of Las Vegas in partnership with Zion Natural History Association, the National Park Foundation, Clark County Parks and Recreation, and others.

The program continues this school year with another set of fifth graders preparing for their beyond the classroom experience.

The National Park Service directors have recognized excellence in wilderness stewardship each year since 1993. In 2004, the award was named in honor of Wes Henry, who led the National Park Service’s Wilderness Program from the early 1990s until his death in 2003. The C2C program received the 2014 Wes Henry National Excellence in [Wilderness Stewardship Award](#). Like Henry, this year’s recipients embody the importance of stewardship and preservation.

The National Park Services Core Team from LAKE included Kevin Turner, Amanda Rowland, and Thomas Valencia.

The team worked well together, collaborating on this important partnership to ensure future generations feel welcome in and knowledgeable about [NPS wilderness](#). Thank you for your excellent work!



Student with Amanda Rowland, Park Ranger and Education Specialist, inspired by the Narrows of Zion National Park .



Students from Rainbow Dream Academy participating in the C2C program, 2015.

The Ripple Effect

ONE SMALL CHANGE
CAN HAVE AN ENORMOUS IMPACT

The Ripple Effect

A single pebble dropped into a pond can create a ripple from shore to shore. Eight million ripples can change the world... If you drop a pebble into a pond where the water is still, you will see a **"ripple"** motion take place where the stone entered the water. That one pebble sets in motion ripples that will impact the entire body of water. The same thing can happen in life, classrooms, or elsewhere. One effort can set forth a **Ripple Effect** that can forever change you, your students or community for the better.

Recycled Art Contest 2015—Nevada's second annual Recycled Art Contest received over 160 entries.



"Spring". 2nd Place Class John F. Miller School

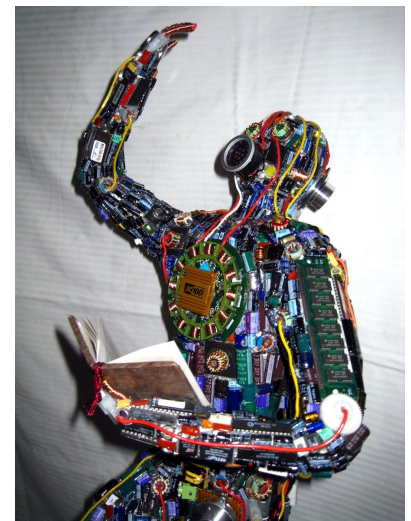
Thanks to everyone who participated for sharing their creativity and enthusiasm for reuse and recycling through art.

Select artwork was displayed in Las Vegas at the Palazzo in November. The South Valley Library in Reno is hosting a display of pieces from Northern Nevada during December and January. For a list of winners and to view all entries go to nevadarecycles.nv.gov.

Nevada Recycles and the Las Vegas Sands Corporation teamed up again to encourage recycling through art. More than 90 Nevada students, 35 classes or clubs and 20 adults created art projects for the contest. The entries show an imaginative and innovative use of recyclable materials like plastic bottles & bags, cardboard, paper, electronics and even tires.



Rainbow Cake. 2nd Place
6-8th grade by Ella Martter
(Las Vegas)



Digital Storyteller. 1st Place Adult
by Dan Hottle (Reno)

The President's Environmental Youth Award (PEYA)

The [PEYA program](http://peya.org) promotes awareness of our natural resources and positive community involvement. Since 1971, the President has joined with EPA to recognize young people across the nation for protecting the air, water, land, and ecology. Two regional awards will be selected for national recognition: Grades K-5 and Grades 6-12. Projects by individuals, school groups, summer camps, and other youth organizations to promote environmental stewardship are eligible. See this [website for details](http://peya.org). Applications due 12/31/15.



Upcoming

Christmas Tree Recycling!

Since 2001, more than 300,000 trees have been recycled throughout Nevada thanks to the help of several Christmas Tree Recycling programs, thousands of volunteers and many community sponsors. These programs were established to provide our communities with an easy alternative to land-filling and to prevent illegal dumping of Christmas trees in public open spaces. When chipped into mulch, cut trees become valuable organic material used in landscaping projects that help conserve soil moisture, keep plants healthy and control weeds. Please remove all decorations and nails, and flocked trees cannot be recycled.

Southern Nevada: The Conservation District of Southern Nevada along with the Christmas Tree Recycling Committee and Community Partners will host the Annual Christmas Tree Recycling Program from December 26 – January 15. Drop off your cut Christmas tree for free at over 34 convenient locations around the Valley. For a drop-off location near you visit http://www.springspreserve.org/apps/location/tree_recycle/.

Douglas County: [Douglas Disposal & Recycling](#) will have curb pickup to recycle your tree January 4 – 8 on your regular collection day.



Northern Nevada: The 2015-16 Keep Truckee Meadows Beautiful (KTMB) Christmas Tree Recycling program in Washoe County runs from December 26 – January 10. There are 9 drop-off locations.

- Bartley Ranch Regional Park (S. Reno)
- Rancho San Rafael Regional Park (N. Reno)
- Shadow Mountain Sports Complex (Sparks)
- Truckee Meadows Fire Protection District
 - Fire Station 16 & 301: Washoe Valley
 - Fire Station 17: Spanish Springs
 - Fire Station 18: Cold Springs
 - Fire Station 221: Silver Knolls
 - Fire Station 223: Lemmon Valley

Drop-off times: 9am – 4:30 pm each day of the program at each site. For more info or to volunteer visit <http://ktmb.org/christmas-tree-recycling/>.

Check out <http://NevadaRecycles.nv.gov> for more information and updates on locations throughout the state.

The Nevada Division of Environmental Protection (NDEP) provides resources and funding for numerous educational and outreach programs and efforts throughout Nevada. NDEP sponsors and endorses Project WET and Recycling programs and curriculum through two Bureaus, Water Quality Planning and Waste Management.

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Southern Nevada Recycling Coordinator
Bureau of Waste Management
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For information on **Discover a Watershed: the Colorado River** and **PWET Workshops** in Clark County contact: Amanda J. D. Rowland, Education & Outreach Specialist
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